



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/359,416	07/23/1999	YOUICHI YAMADA	P7156-9039	2778

4372 7590 04/13/2005

ARENT FOX KINTNER PLOTKIN & KAHN
1050 CONNECTICUT AVENUE, N.W.
SUITE 400
WASHINGTON, DC 20036

EXAMINER

MICHALSKI, JUSTIN I

ART UNIT	PAPER NUMBER
----------	--------------

2644

DATE MAILED: 04/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/359,416

Applicant(s)

YAMADA ET AL.

Examiner

Justin Michalski

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "said past operation means" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Suzuki et al. ("Suzuki") (US Patent 6,452,082).

Regarding Claim 1, Suzuki discloses an audio signal processing apparatus, comprising: signal processing means (Fig. 1, CPU 3) for processing audio signals fed from outside equipment (Col. 6, lines 22-26); operating means for setting parameters in

Art Unit: 2644

order for said signal processing means to process the audio signals (Col. 6, line 66 through Col. 7, line 2); storing means for storing a series of past operation data containing past operation information of the operating means (Suzuki discloses storing means for storing a plurality of waveforms, i.e. glissando, Col. 2, lines 33-34), said past operation means being associated with a series of movements of said operating means (It is inherent that operation means and information is a function of movement of operating means, i.e. switches on operating panel); designating means capable of automatically effecting a desired treatment in accordance with the past operation data stored in the storing means (glissando waveform from the plurality of kinds of waveforms stored, Col. 2, lines 41-44); and control means (CPU 3) for setting parameters in order for said signal processing means to process the audio signals in accordance with said desired treatment when said designating means is operated.

Regarding claim 2, Suzuki discloses everything claimed as applied above (see claim 1). Suzuki further discloses an executing step for enabling the storing of a plurality of kinds of waveforms (series of past operations) (col. 2, lines 33-34). Suzuki further discloses an executing step for designating a sequence of waveforms necessary for generating a desired treatment from the plurality of kinds of waveforms stored (col. 2, lines 41-43).

Regarding Claim 7, Suzuki discloses an audio signal processing apparatus, comprising: a signal processor (Fig.1, CPU 3) which processes audio signals fed from outside equipment (Col. 6, lines 22-26); an operating device which sets parameters in order for the signal processor to process the audio signals (Col. 6, line 66 through Col.

7, line 2); a memory device which stores a series of past operation data containing past operation information of the operating device (Suzuki discloses storing means for storing a plurality of waveforms, i.e. glissando, Col. 2, lines 33-34), the past operation information being associated with a series of movements of the operating device (It is inherent that operation means and information is a function of movement of operating means, i.e. switches on operating panel); a designating device capable of automatically effecting a desired treatment in accordance with the past operation data stored in the memory device (glissando waveform from the plurality of kinds of waveforms stored, Col.2, lines 41-44); and a controller (CPU 3) which sets parameters in order for the signal processor to process the audio signals in accordance with the desired treatment when the designating device is operated.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of Silfvast et al. ("Silfvast") (US Patent 6,438,241).

Regarding claim 3, Suzuki discloses everything claimed as applied above (see claim 1). Suzuki discloses the operating means as composed of switches for manually setting the parameters (performance method). Suzuki fails to specifically disclose the

Art Unit: 2644

type of switch used. The Office maintains there are various types of switches, which include slides, push buttons, flick switches and rotary knobs, etc. Silfvast discloses a rotary control for an audio mixer or other audio processor, that is referred to as a rotary switch (see figure 7), which sets parameters by the angular position of the rotational knob (col. 2, lines 27-30). Therefore it would have been obvious for one of ordinary skill to use a rotational knob as disclosed by Silfvast to modify Suzuki's switch to set parameters. Both are well known in the art for adjusting levels and setting desired values and therefore could use either for parameter settings.

Regarding claim 4, Suzuki in view of Silfvast discloses everything claimed as applied above (see claim 3). Silfvast further discloses a display such as an array of lights wherein a sensor is coupled with the rotor, which senses its relative rotation wherein the display of lights is in response to the sensor to indicate a value of a parameter (col. 2, lines 40-56).

Regarding claim 5, Suzuki in view of Silfvast discloses everything claimed as applied above (see claim 4). It is inherently taught that the faster the knob is turned the quicker the sensor picks up the information in order to display the light referencing the position of the parameter. Therefore the rotating direction and the speed of the knob being turned (angular velocity) is inherently used to calculate the rotating amount and which the position setting is verified by the display.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (US Patent No. 6,452,082 B1).

Regarding claim 6, Suzuki in view of Silfvast discloses everything claimed as applied above (see claim 1). Suzuki further discloses combining waveforms of different musical tones and effects, such as slur, trill, etc. Therefore it would have been obvious to one of ordinary skill in the art to produce sounds such as, for example a jet or a bell for desired sound effects. It is also well known in the art that a mixing console is capable of controlling, mixing and designing audio sounds of all ranges and therefore commonly allows the user to adjust the pitch or frequency of a sound to produce a desired output of audio.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Michalski whose telephone number is (571)272-7524. The examiner can normally be reached on M-F 7-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571)272-7564. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JIM



SINH TRAN
SUPERVISORY PATENT EXAMINER